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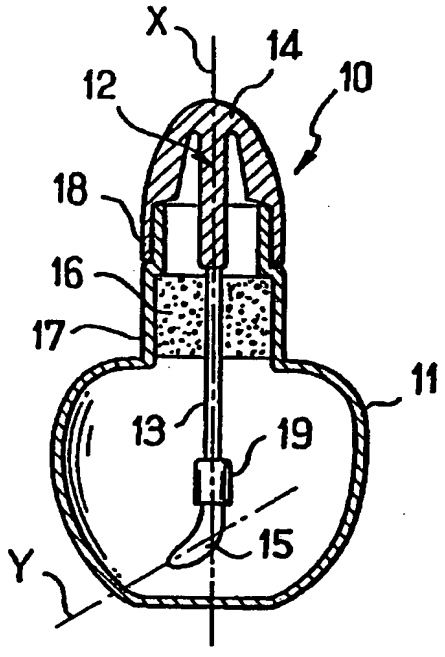
(54)【発明の名称】　収納塗布器具

(57)【要約】
【課題】　人間工学に適合した化粧品等の収納塗布器具を提供する。
【解決手段】　多孔質の弾性変形可能な材料から少なくとも一部が構成された払拭部材（１６）を具有し、塗布部材（１５）、把持部材（１２）および連結部材（１３）が非直線状に配列された化粧品等の収納塗布器具（１０）。



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【特許請求の範囲】

【請求項１】　液状、ペースト状もしくは粉状の製品、特に化粧品の収納塗布器具であって、一端が開口した該製品収納用容器、一方の端部に塗布部材を有して他方の端部に把持部材を有する塗布具、および該塗布部材と把持部材を連結する連結部材を具備する収納塗布器具において、該器具が多孔質の弾性変形可能な材料から少なくとも一部が構成された払拭部材をさらに具有し、該塗布部材、該把持部材および該連結部材が非直線状に配列されたことを特徴とする収納塗布器具。

【請求項２】　払拭部材が軸方向のスロットの入った発泡体ブロックによって構成され、該スロットの縁部が不使用時には突合わされる請求項１の器具。

【請求項３】　塗布具の自由端部を構成する塗布部材の軸方向の一方の端部によって連結された連結部材の延長線上に該塗布部材が延びた請求項１または２記載の器具。

【請求項４】　連結部材（３３）が屈曲した請求項１から４いずれかに記載の器具。

【請求項５】　塗布部材（１５；２５；３５）を固定するためのハウジング（１９；２８；３８）を形成するために把持部材（１２；２２；３２）の反対側の端部が肥大したロッド（１３；２３；３３）によって連結部材が構成された請求項１から４いずれかに記載の器具。

【請求項６】　ハウジング（２８）がその隣接領域内のロッド（２３）の軸（Ｘ）に対してゼロでない角度（ｗ）を成す軸（Ｙ）に沿って延びた請求項５記載の器具。

【請求項７】　連結部材が少なくとも２つの分枝部材（４１）を有する請求項１から４いずれかに記載の器具。

【請求項８】　塗布部材（１５）が湾曲した請求項１から７いずれかに記載の器具。

【請求項９】　塗布部材（４３）が、把持部材の隣接領域内における連結部材（４１）の方向に対してゼロでない角度（γ）を成す請求項１から７いずれかに記載の器具。

【請求項１０】　塗布部材がほぼ平坦な形態を有する請求項１０記載の器具。

【請求項１１】　塗布部材（５２）が波状形態を有する請求項１から１０いずれかに記載の器具。

【請求項１２】　塗布部材（９０）が硬質材料製もしくは半硬質材料製のコア（９１）を有し、該コアが屈曲部を形成して連結部材（９２）に連結された請求項１から１１いずれかに記載の器具。

【請求項１３】　塗布部材（１１５）がプラスチック材料、例えばエラストマーの射出成形によって少なくとも部分的に形成された請求項１から１２いずれかに記載の器具。

【請求項１４】　塗布部材（１１２）が毛を有する請求項１から１３いずれかに記載の器具。

【請求項１５】　塗布部材（１１２）が非対称である請求項１から１４いずれかに記載の器具。

【請求項１６】　塗布部材（８５）が少なくとも１つの螺旋状フィラメントを有する請求項１から１５いずれかに記載の器具。

【請求項１７】　塗布部材（７１）が円弧状横断面を有する請求項１から１６いずれかに記載の器具。

【請求項１８】　塗布部材（１１８）が１または複数のスロットもしくは空洞（１１９）を有する請求項１から１７いずれかに記載の器具。

【請求項１９】　払拭部材が少なくとも５％の開放気泡を有する発泡体によって少なくとも部分的に構成された請求項１から１８いずれかに記載の器具。

【請求項２０】　発泡体がポリウレタン製もしくはポリエーテル製である請求項１９記載の器具。

【請求項２１】　塗布具が容器上の位置にあるときに払拭部材と接触して延びた領域内において、連結部材が塗布部材の横断面よりも小さな横断面を有する請求項１から２０いずれかに記載の器具。

【請求項２２】　連結部材が、塗布具が容器内の位置にあるときに払拭部材と接触して延びた領域内における直径が好ましくは０．２～２㎜、特に０．２～０．５㎜のロッドによって構成された請求項１から２１いずれかに記載の器具。

【発明の詳細な説明】

【０００１】

【発明の属する技術分野】この発明は液状、ペースト状（半流動状）もしくは粉状の製品、特に化粧品の収納塗布器具に関する。より詳細には、この発明は一端が開口した該製品収納用容器、一方の端部に塗布部材を有すると共に他方の端部に把持部材を有して該容器を閉鎖するキャップとしても機能する塗布具を具備する該製品の収納塗布器具に関する。塗布部材と把持部材はロッドのような連結部材によって連結される。

【０００２】

【従来の技術】国際出願ＷＯ９７／３１５５３号には、塗布部材、ロッドおよび把持部材が一列に配列され、塗布部材が容器内へ挿入された後、少なくとも５％の開放気泡を有する発泡体のような弾性変形可能な多孔質材料によって少なくとも一部が構成された払拭部材を通して抜去されるような容器が開示されている。

【０００３】

【発明が解決しようとする課題】この発明は前記のタイプの新規な人間工学に適合した器具であって、特に化粧操作等の容易化と化粧品等の正確な塗布を可能にすると共に、新規な化粧品もしくはスキンケア製品等の塗布の可能性を高める器具を提供するためになされたものである。

【０００４】即ちこの発明は、液状、ペースト状もしく

は粉状の製品、特に化粧品の収納塗布器具であって、一端が開口した該製品収納用容器、一方の端部に塗布部材を有して他方の端部に把持部材を有する塗布具、および該塗布部材と把持部材を連結する連結部材を具備する収納塗布器具において、該器具が多孔質の弾性変形可能な材料から少なくとも一部が構成された払拭部材をさらに具有し、該塗布部材、該把持部材および該連結部材が非直線状に配列されたことを特徴とする収納塗布器具に関する。

【０００５】

【発明の実施の形態】この発明による収納塗布器具の特徴は塗布部材、把持部材および連結部材を直線状に配設させないことである。即ち、少なくとも連結部材と塗布部材を湾曲させるか、または屈曲させ、塗布部材を把持部材の隣接領域内に延びた連結部の軸方向から外れるようにする。

【０００６】本発明がなされた後、出願人は驚くべきことには次のことを確認した。即ち、塗布部材を払拭部材の軸に対して傾斜させても該塗布部材は払拭部材によって満足できるように払拭される(先験的にはこのような傾斜によっては満足できる払拭効果は得られないことが予想されていた）。

【０００７】本発明によれば、特に、人間工学に適合した塗布具の製作、化粧操作等の容易化および化粧品等の出来るだけ正確な使用が可能となる。

【０００８】特定の態様においては、連結部材は屈曲状である。また、特定の態様においては、連結部材は塗布部材を固定するハウジングを形成する肥大端部を把持部材の反対側に有するロッドによって構成される。該ハウジングはその隣接領域内の該ロッドの方向との間に０度以外の角度を成す方向に延びる。また、塗布部材の形態としては多数の形態が可能である。

【０００９】特定の態様においては、塗布部材は湾曲状である。別の特定の態様においては、塗布部材はほぼ平らな形態を有し、把持部材の隣接領域内の連結部材の方向との間に角度を成す。さらに別の特定の態様においては、塗布部材は波状形態を有する。

【００１０】別の特定の態様においては、塗布部材は硬質もしくは半硬質性材料から成るコアを有しており、該コアは屈曲部が形成されるように連結部材に連結される。また、特定の態様においては、塗布部材は少なくとも部分的にはプラスチック材料(例えば、エラストマー）から射出成形される。

【００１１】特定の態様においては、塗布部材は毛を有する。特定の態様においては、塗布部材は非対称である。特定の態様においては、塗布部材は少なくとも螺旋状フィラメントを有する。別の特定の態様においては、塗布部材は一般的には湾曲した形態を有する。さらに別の特定の態様においては、塗布部材は１または複数のスロットもしくは空洞を有する。

【００１２】本発明による収納塗布器具は特にアイ化粧品、マニキュア液もしくは類似品の塗布または口紅もしくは類似品の塗布に利用することができ、塗布部材の形態と特徴および払拭部材の多孔質材料の密度と高さは対象製品の性状、用途(使用目的）および所望の効果に応じて選択される。

【００１３】塗布具が容器内に位置するときに払拭部材と接触する領域内の連結部材の横断面は塗布部材の横断面よりも小さくするのが好ましい。連結部材がロッドによって構成される態様においては、塗布具が容器内に位置するときに払拭部材に接触して延びた領域内における該ロッドの直径は好ましくは０．２～２㎜、より好ましくは０．２～０．５㎜である。

【００１４】好ましい態様においては、払拭部材は軸方向にスロットの入った発泡体ブロックによって構成され、該スロットのエッジは不使用時には突合わせた状態にある。発泡体ブロックがいくつかのスロットを有する場合には、該スロットは十字状もしくは星状(放射状）に配設してよい。従って、少なくとも１つのスロットを有して塗布具が所定の位置にあるときには連結部材によって実質上変形されず、塗布具の抜去後は閉鎖する発泡体ブロックによって払拭は好ましくおこなわれる。

【００１５】この種の払拭部材を用いることによって、塗布部材上の製品の均質分布に関して非常に優れた結果が得られる。好ましくは、塗布部材は連結部材の延長線上に延び、その軸上の一方の端部は連結部材に連結され、他方の端部は塗布具の自由端部を構成する。

【００１６】本発明のその他の特徴と利点は、本発明を限定するものではない実施態様についての以下の詳細な説明および添付図によって明らかにする。

【００１７】図１～図４は本発明の４種の実施態様による収納塗布器具の軸方向に沿った模式的断面図である。図５および図６は本発明の第５の実施態様による収納塗布器具を構成する容器と塗布具を別々に示す模式的斜視図である。図７～図１５は塗布部材の種々の変形態様を示す模式的斜視図である。図１６～図１８は本発明による塗布具を用いてアイ化粧品、マニキュアおよび口紅を塗布する様子をそれぞれ示す。

【００１８】図１に示す収納塗布器具（１０）は一方の端部が開口した容器（１１）および塗布具（１２）を具有する。塗布具（１２）は軸（Ｘ）に沿って直線状のロッド（１３）を有しており、該ロッドは一方の端部に把持部材（１４）を備えていて、該把持部材は容器（１１）を閉鎖するためのキャップを構成する。ロッド（１３）は他方の端部に塗布部材（１５）を具有する。

【００１９】容器（１１）は発泡体ブロック（１６）によって構成される払拭部材を収納する頸部（１７）を有する。払拭部材（１６）は、例えば、接着剤を用いてその半径方向の外部表面を介して頸部（１７）内に固定される。把持部（１４）は容器（１１）の頸部（１７）の

外部のねじ山にねじ留めするために内部にねじ山が配設されたアセンブリースカート（１８）を有する。

【００２０】前記の発泡体ブロック（１６）には、塗布部材（１５）を使用のために容器（１１）から抜去するときに、該塗布部材を通過させるためのスロットが図１の軸方向に沿って形成される。

【００２１】払拭部材の種々の実施態様が記載されている国際出願ＷＯ９７／３１５５３号明細書の記載内容を有効に利用できる。好ましくは、払拭能を損なう永続的変形が生ずる危険を回避するために、塗布具（１２）のロッド（１３）が容器の内部に位置するとき払拭部材（１６）の発泡体が過度に圧縮されないように留意すべきである。

【００２２】発泡体ブロック（１６）はロッド（１３）との接触部分の直系と等しいか、または該直径よりも幾分小さな直径を有する軸方向の空洞を有していてもよく、あるいはこの変形態様として、該ブロックに軸方向のスロットを形成させてもよい。ロッド（１３）の最も小さな直径を有する部分は金属製であってもよく、該直径は、例えば、０．２～０．５㎜である。

【００２３】さらに、発泡体ブロック（１６）は容器（１１）の頸部内へ差し込み固定されるので、該ブロックは垂直方向に沿って強化され、塗布部材（１５）の通過時の軸方向の圧縮は防止される。

【００２４】ロッド（１３）の下部端は肥大して軸（Ｘ）上に塗布部材（１５）を固定するためのハウジング（１９）を軸（Ｘ）上に形成し、該塗布部材は該ハウジング内に部分的に収容される。塗布部材（１５）は利用に供する化粧品の種類に適合した構造にすることができる。図示する態様の場合、塗布部材（１５）は湾曲しており、また、その自由端に接近するにつれて軸（Ｘ）に対して徐々に増大する角度を成す方向に沿って延びる。該自由端の近傍においては、塗布部材は軸（Ｘ）に対して、例えば、６０度の角度を成す方向（Ｙ）に沿って延びる。

【００２５】容器（１１）は化粧品、好ましくは液状化粧品で満たされる（該化粧品は図を見やすくするために省略してある）。驚くべきことには、塗布部材（１５）を、化粧品の品質を損なう少量の余剰化粧品を残存させることなく、発泡体ブロック（１６）内の通過時に均一な操作で払拭することが出来る。このような結果は、発泡体ブロック（１６）の多孔性と変形性に起因して得られるもので、該ブロックには塗布部材の一部に存在する余剰化粧品が含浸すると共に、化粧品の含有量が不充分な塗布部材の別の部分に存在する化粧品が毛管作用によって沈積する。

【００２６】発泡体ブロック（１６）は塗布具（１２）を使用に供するために容器（１１）から抜去するときまたは該塗布具を元の位置に戻すときにロッド（１３）を払拭するのに適合している。ロッド（１３）のこのような払拭は、これによってロッド上での乾燥による固体状残渣の形成が回避されるので特に有利である。

【００２７】払拭部材としては開放気泡を有する発泡体、例えば、ポリウレタン製またはポリエーテル製発泡体を利用できる。この種の発泡体は少なくとも５％の開放気泡を有するのが好ましく、該気泡の直径は好ましくは５μｍ～３㎜である。発泡体ブロックの高さは、例えば、１．５～８０㎜である。

【００２８】発泡体の密度と発泡体ブロックの高さに応じて、払拭部材は、塗布部材が発泡体ブロックを貫通するときに該塗布部材の外形と密着適合する。塗布部材への化粧品の沈着に関する試験を行ったところ、ある場合には塗布部材の外形に化粧品の皮膜が付着したが、別の場合には塗布部材の隆起が表面張力による化粧品の皮膜によって被われた。

【００２９】一般的には、塗布部材が柔軟なほど発泡体ブロックを貫通するときに該塗布部材は変形しやすく、また、払拭後に該塗布部材上に残存する化粧品の量はより少なくなる。特に、塗布部材がブラシの場合には、ブラシの毛が柔軟なほど払拭部材を貫通するときに該塗布部材は伏せてブラシの軸に接近しやすくなり、また、塗布具を容器から完全に抜去するときにブラシ上に付着する化粧品の量はより少なくなる。

【００３０】不使用時のブラシの毛は任意の方向、例えば、把持部材の軸に対して垂直方向に延びていてもよい。さに、次のことに留意すべきである。即ち、もし容器内に収容される製品が水を溶剤とする液状化粧品(例えば、アクリル樹脂またはポリウレタン樹脂の水性組成物）の場合、発泡体ブロックは容器内の該化粧品を使い尽くすまで該化粧品に含まれる該樹脂の発泡体内での架橋を防止するために十分な湿気を保持すことができ、これによって該ブロック内を通過するロッドと塗布部材を湿らすことができる。

【００３１】払拭部材を構成する発泡体ブロックは次の作用を同時に示す：

（１）塗布部材の締め付けと係留により余剰化粧品および液状もしくはペースト状化粧品の乾燥によって生ずることのある固体状残渣が削り取られることによる該塗布部材の機械的な払拭と清浄化作用、（２）毛管現象による吸収作用、（３）塗布部材の通過による局部的圧縮後に元の形態に復帰するときの吸収による吸収作用、および（４）塗布部材への化粧品の付着量が払拭部材によりも少ないときに行われることのある塗布部材への化粧品の含浸作用。

【００３２】容器（１１）は、塗布具（１２）が該容器（１１）の内部に位置したときに塗布部材（１５）が容器の内壁に接触しないほど十分な大きさを有する。また、容器（１１）の開口部は、該容器（１１）への塗布部材（１５）の出入を可能にするのに十分な大きさを有する。塗布具（１２）を抜去するには、把持部材（１

４）のねじを戻した後、該部材を軸（Ｘ）に対して平行な状態で上方へ移動させる。

【００３３】塗布部材（１５）はユーザーがロッド（１３）を傾けることなく発泡体ブロック（１６）を通過できる形態を有する。塗布部材（１５）はそれ自体が弾性変形するときには発泡体ブロック（１６）内を一層容易に通過する。塗布部材（１５）は、該塗布部材（１５）か発泡体ブロック（１６）内を通過するときにユーザーがロッド（１３）を自然に傾けるような形態を有していてもよい。

【００３４】塗布具を元の位置に戻すためには、塗布部材（１５）を容器の開口部内へ導入し、該塗布部材（１５）を発泡体ブロック（１６）内へ押し込む。好ましくは、発泡体ブロック（１６）はユーザーが特別な注意するかもしくは塗布部材（１５）を所定の方向へ向けることなく該部材を元の位置に戻すの十分な柔軟性を有する。

【００３５】以下の説明おいては払拭部材は類似の形態を有しており、図２～図４においては（１６）で示し、これについてはさらに詳述しないので先の説明を参照されたい。図２に示す収納塗布器具（２０）は把持部材と容器（２１）の上部に関しては前述の収納塗布器具（１０）と類似する。塗布具（２２）は軸（Ｘ）に関して直線状のロッド（２３）を有しており、該ロッドの下部端には、塗布部材（２５）を固定するための肥大した傾斜ハウジング（２８）が形成される。ハウジング（２８）は軸（Ｙ）に沿って延び、軸（Ｙ）とロッド（２３）の軸（Ｙ）は角度（ｗ）を成し、該角度は好ましくは１０～６０度であり、図２の場合は約４５度である。

【００３６】塗布部材（２５）は不使用時は軸（Ｙ）に関してほぼ直線状であるが、図示していない変形態様の場合には屈曲していてもよい。図２に示す態様の場合、塗布部材を出入させるためにはロッド（２３）を幾分傾けなければならないことに留意すべきである。これは塗布部材が容器の頸部の内径より長いからである。

【００３７】容器のキャップ(閉鎖部材）は別の態様では容器頸部の上方に把持部材がねじ止めされるようにしてもよい。例えば、図３に示す収納塗布器具（３０）の場合、把持部材は容器の頸部の上方に嵌合保持される。塗布具（３２）は屈曲状のロッド（３３）を有し、該ロッドは２つの直線状部分から成り、両者は角度（ｖ）を成し、該角度は好ましくは１０～６０度であり、図に示す例では約３０度である。ロッド（３３）の屈曲部（３６）は塗布具（３２）が所定の位置にあるときには、発泡体ブロック（１６）のすぐ下に位置する。

【００３８】塗布部材（３５）はロッド（３３）の下方の直線状部の延長線上に位置する。この例の場合、塗布部材（３５）はロッド（３３）の下部端に位置する拡大部（３８）の直径よりも約２倍大きい最大横幅を有し、該拡大部は塗布部材（３５）を固定するためのハウジングを形成する。

【００３９】図４に示す態様においては、把持部材（４４）と塗布部材（４３）の間の連結部材は２本の相互に平行な直線状分枝体（４１）を有し、該分枝体の下部端には塗布部材（４３）を固定するハウジング（４２）が連結される。塗布部材（４３）はほぼ平行に配置された複数の同心環から構成され、これらの面は分枝体（４１）の面との間で２面角(ｒ）を形成し、該角度は好ましくは１００～１７０度である。

【００４０】分枝体（４１）の面は図４の切断面および塗布部材（４３）を通過させるための発泡体ブロック（１６）内のスロット面と平行である。この場合、塗布具が所定の位置にあるときに分枝体（４１）の面を発泡体ブロック（１６）のスロット面と一致させるために、容器の頸部と把持部材（４４）に関し、該頸部に対して該把持部材が角を成して位置するように割出しする手段を用いるのが有利である。分枝体（４１）の直径は発泡体の変形が非常に小さくなるように出来るだけ小さくする。

【００４１】図５および図６に示す収納塗布器具（５０）においては、塗布部材（５２）は大きな幅と波状形態を有する。容器および塗布具（５１）はれぞれ別々に図５および図６に示す。払拭部材は塗布部材（５２）を通過させるのに十分長いスロットの入ったほぼ平行六面体の形態を有する発泡体から構成する。塗布部材（５２）と把持部材（５４）を連結する連結部材（５３）は平坦壁か構成され、該平坦壁はその下部端で肥大しており、該肥大部は塗布部材（５２）を固定するための溝を有する。

【００４２】把持部材（５４）は連結部材（５３）を包囲するスカートを備えており、該スカートは塗布具（５１）の払拭と所定位置での保持を可能にするように閉鎖するために容器上にはめ込むのに適合した形態を有する。塗布部材（５２）は波状形態を有しているにもかかわらず、発泡体の変形能に起因して適確に払拭される。発泡体は塗布部材の凹部と接触するのに十分な柔軟性を有する。図示する態様の場合、塗布部材（５２）は連結部材（５３）の平坦壁に対して約４５度の角度を成して延びる。

【００４３】一般的には、払拭のために発泡体ブロックを利用することにより、塗布部材の形態は多種多様に変化させることが出来る。例えば、図７に示す塗布部材（７１）は軸（Ｚ）の周りに湾曲した形態を有しており、該軸は連結部材（７４）の軸との間に角度（ｕ）を成す。角度（ｕ）は好ましくは１０～６０度である。塗布部材（７１）は軸（Ｚ）に垂直な断面方向において一般に円弧状の横断面を有する。塗布部材（７１）の側縁部（７２）は連結部材（７４）からわずかに離れており、また、連結部材（７４）からより離れた縁部（７３）は、図示す場合には、内側に幾分くぼんだ形態を有

する。塗布部材（７１）は、例えば、爪の表面への化粧品の塗布に適している。

【００４４】図８に示す塗布部材（８０）は側部に切り込み部（８１）を備えた非対称形態を有する。塗布部材（８０）は、例えば、多孔性材料製であってもよい。払拭部材の発泡体が払拭中に切り込み部の底部まで達しないような十分な濃密さを有するよう該発泡体を選択することにより、払拭後に切り込み部の底部に化粧品を残存させることができる。従って、切り込み部（８１）は容器から抜去後の塗布具の連続使用能を延長させる化粧品貯留部を構成する。塗布部材（８０）は連続部材（８２）の軸に対してゼロではない角度を成す方向へ延びる(図８参照)。また、塗布部材（８０）は図示するような線条溝を有する。

【００４５】図９に示す塗布部材（８５）はロッド（８６）の軸（Ｘ）に対して角度（ｔ）を成す軸（Ｚ）に沿って延びる螺旋状フィラメントを有する。角度（ｔ）は、例えば、約３０度である。

【００４６】図１０に示す塗布部材（９０）は、屈曲部（９３）を介して接続された２つのアーム（９１）および（９２）を保有する半硬質プラスチック製コア（９１）を有する。アーム（９２）は塗布具のロッド（９５）の下部端に形成されたハウジングの内部でかみ合う。別のアーム（９１）は化粧品塗布用発泡体ブロック（９４）の剛性を高めると共に該ブロックを支持する。

【００４７】図１１に示す塗布部材１００）は軸（Ｕ）に沿って延びた横断面がほぼ台形の回転楕円体状の形態を有する。塗布部材の各々の表面は外側に幾分くぼんだ窪みを有する。塗布部材（１００）は先細端部（１０１）を有する。塗布部材（１００）は、例えば、硬質、半硬質または弾性のプラスチック材料から射出成形によって製造してもよい。図示する態様の場合、塗布部材（１００）は、塗布具のロッド（１０３）の下部端に形成されたハウジング（１０２）の内部に挟み込まれる。該ハウジングはロッド（１０３）の軸（Ｘ）に対してゼロではない角度を成す。図示しない変形態様においては、塗布部材はロッドと一体成形させてもよい。

【００４８】図１２に示す塗布具（１０５）の場合のように、塗布部材はブラシによって構成されていてもよく、該ブラシは任意の形態のものであってもよいが、特に、大小の直径部分を有するものであってもよい。この種の塗布具（１０５）は螺旋状に撚り合されて毛（１０７）を支持する金属製糸によって構成された金属製コア（１０６）を有し、該ブラシの軸はロッド（１０８）の軸（Ｘ）に対して、例えば、約３０度の角度（ｓ）を成す。この場合、コア（１０６）は屈曲しており、ロッド（１０８）の下部端の肥大部（１０９）の内部に形成されたハウジングの内部に固定される（該ハウジングは軸（Ｘ）上に位置する）。図示しない変形態様においては、該ハウジングは傾斜し、ブラシのコアは完全に直線状である。

【００４９】図１３に示す塗布部材（１１２）の表面はフロック加工されている（即ち、細い毛で覆われている）。図１３から明らかなように、塗布部材（１１２）は塗布具のロッド（１１３）の軸（Ｘ）に関して非対称である。この非対称形態に起因して塗布部材（１１２）はロッド（１１３）とは同一線上に位置しない。

【００５０】図１４に示す曲線状の塗布部材（１１５）は円のほぼ４分の１に対応する形態を有しており、その断面は一般に円形状であって、その表面は碁盤縞状である。この塗布具の一般的な形態は前述の塗布具（１５）の形態に類似しており、該塗布具は、例えば、プラスチック材料から射出成形して製造してもよい。

【００５１】図１５に示す塗布具（１１８）はプラスチック材料の注型によって製造することができ、該塗布具はスロットまたは空洞（１１９）を有する。このようなスロットまたは空洞（１１９）は払拭後、表面張力によって塗布部材（１１８）の内部に存在する化粧品を貯留するが、これは払拭部材が該スリットまたは空洞の内部を貫通し難いからである。

【００５２】図１６にはアイ化粧品を塗布するための前記の塗布具（１０）および（２０）の使用態様を示す。この種の偏心した塗布部材を用いることによって、ユーザーは目の化粧を一層容易にすることができる。

【００５３】さらに、本発明による偏心塗布部材、例えば、前述の塗布部材（７２）を用いることによって爪の上に化粧品を人間工学的に非常に適合した状態で塗布することができる(図１７参照)。

【００５４】さにまた、非対称塗布部材（１１２）を用いることによって、例えば、ユーザーはリップ化粧品を一層容易に塗布することができる（図１８参照）。

【００５５】本発明による収納塗布器具は、例えば、毛髪用製品にも適用できる。連結部材としてロッドを用いる場合、把持部材は塗布具が元の位置に存在するときには容器の頸部に関して任意の方向に向けることができる(但し、この場合には、容器頸部の軸の方向にかかわらず、該容器が塗布部材を収納するのに十分な大きさを有することを条件とする)。

【００５６】上記の種々の実施態様においては、連結部材は相当な可撓性を有するのが好ましい。もちろん、本発明は上記の実施態様に限定されるものではなく、特に、本発明の固有の特徴と前述の各々の実施態様との組合せを一部に含む種々の変形態様も本発明に包含される。

【００５７】

【発明の効果】本発明による収納塗布器具は人間工学に適合しているので、これを使用することによって、特に化粧操作等の容易化と化粧品等の正確な塗布が可能になるだけでなく、新規な化粧品等の塗布の可能性を高めることができる。

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【図面の簡単な説明】

【図１】　本発明による収納塗布器具の第１の実施態様を示す模式的断面図である。

【図２】　本発明による収納塗布器具の第２の実施態様を示す模式的断面図である。

【図３】　本発明による収納塗布器具の第３の実施態様を示す模式的断面図である。

【図４】　本発明による収納塗布器具の第４の実施態様を示す模式的断面図である。

【図５】　本発明による収納塗布器具の第５の実施態様を構成する容器の模式的斜視図である。

【図６】　本発明による収納塗布器具の第５の実施態様を構成する塗布具の模式的斜視図である。

【図７】　円弧状横断面を有する塗布部材の模式的斜視図である。

【図８】　切り込み部を有する非対称塗布部材の模式的斜視図である。

【図９】　螺旋状フィラメントを有する塗布部材の模式的斜視図である。

【図１０】　２つのアームを保有する半硬質プラスチック製コアを有する塗布部材の模式的斜視図である。

【図１１】　回転楕円体状の塗布部材の模式的斜視図である。

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＊【図１２】　ブラシを有する塗布部材の模式的斜視図である。

【図１３】　フロック加工表面を有する非対称塗布部材の模式的斜視図である。

【図１４】　碁盤縞状表面を有する曲線状塗布部材の模式的斜視図である。

【図１５】　スロットまたは空洞を有する塗布部材の模式的斜視図である。

【図１６】　本発明によるアイ化粧品塗布具の使用態様を示す模式図である。

【図１７】　本発明によるマキュア塗布具の使用態様を示す模式図である。

【図１８】　本発明によるリップ化粧品塗布具の使用態様を示す模式図である。

【符号の説明】

１１，２１，３１…容器

１２，２２，３２，４４，５４…把持部材

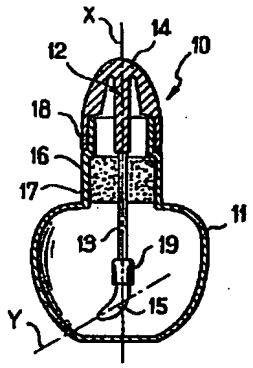
１３，２３，３３，８６，９５，１０３，１０８，１１３…ロッド

１５，２５，３５，４３，５２，７１，８０，８５，９０，１００，１１２，１１５，１１８…塗布部材

１６，９４…発泡体ブロック

１９，２８，３８…ハウジング

【図１】



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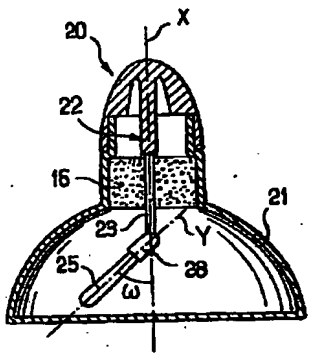

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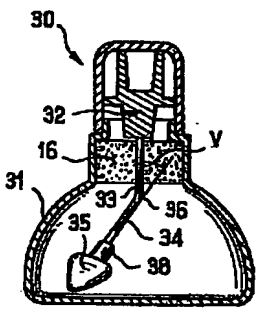

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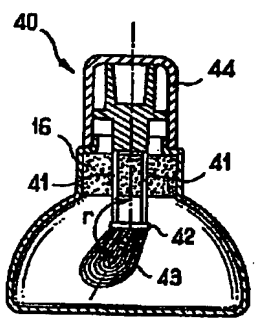

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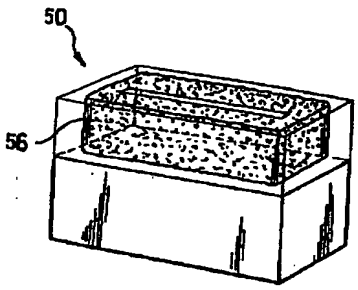

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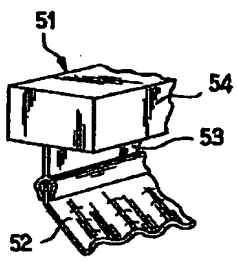

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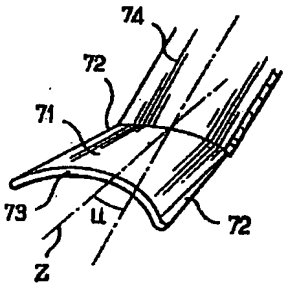

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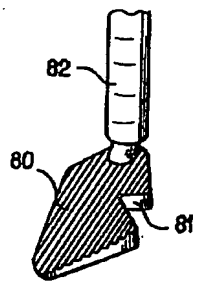

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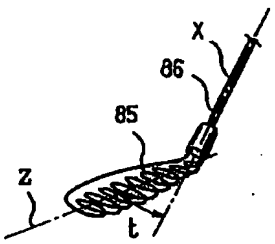

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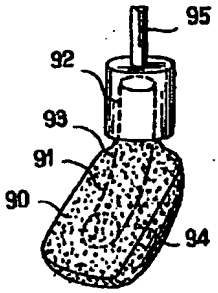

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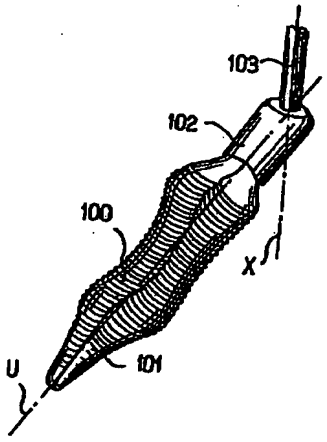

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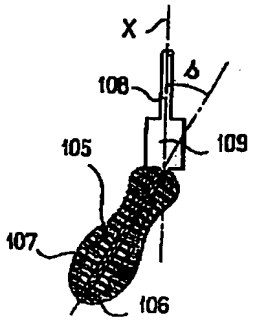

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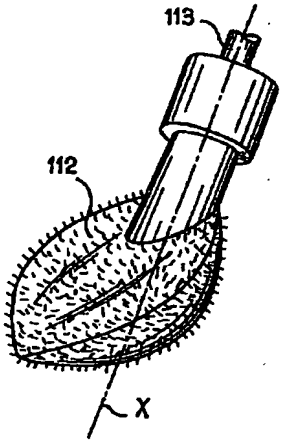

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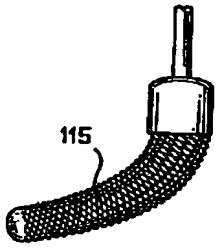

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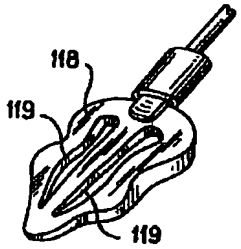

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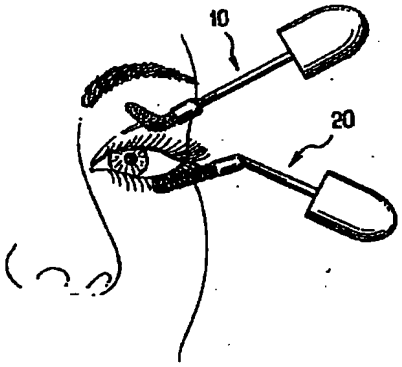

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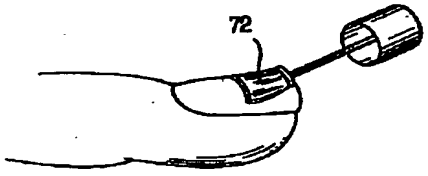

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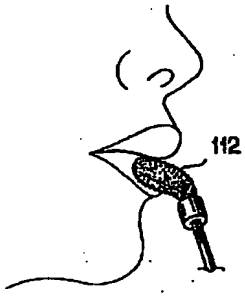

PATENT ABSTRACTS OF JAPAN

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(30)Priority
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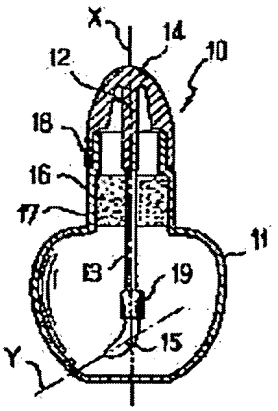
(54) STORAGE AND APPLICATION APPLIANCE

(57)Abstract:
PROBLEM TO BE SOLVED: To facilitate making-up and to enable correct application of cosmetic, etc., by providing as wiping member at least a part of which consists of a porous, elastically-deformable material, and arranging an applying member and a holding member of an applicator, and their connection members in a non-straight manner.
SOLUTION: A wiping member 16 is stored in a neck part 17 of a container 11. The wiping member 16 is formed of a foamed body having open bubbles. An applying member 15 is curved in the direction to form a gradually increasing angle relative to the axis X as closer to its free end. Excessive cosmetics present on a part of the applying member 15 is impregnated in the wiping member 16 by the porosity and deformation of the wiping member 16, and the cosmetics present on the applying member 15 insufficient in the content of the cosmetic is deposited due to the capillary effect. Thus, no excessive cosmetic to damage the quality of the cosmetics is left behind on the applying member 15.



LEGAL STATUS

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[Date of registration]	02.08.2002
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1] It is the receipt spreading instrument of a liquid, the shape of a paste, a powdery product, especially cosmetics. In this container for product receipt in which the end carried out opening, the applicator which has a spreading member at one edge and has a grasping member in the other-end section, and the receipt spreading instrument possessing the connection member which connects this spreading member and a grasping member The receipt spreading instrument with which this instrument is characterized by having possessed further the eradication member by which at least the part was constituted from an ingredient in which porous elastic deformation is possible, and arranging this spreading member, this grasping member, and this connection member in the shape of nonlinear.
[Claim 2] The instrument of claim 1 with which an eradication member is constituted by the foam block containing the slot of shaft orientations, and the edge of this slot is compared at the time of un-using it.
[Claim 3] The instrument according to claim 1 or 2 with which this spreading member was prolonged on the production of the connection member connected by one edge of the shaft orientations of the spreading member which constitutes the free edge of the applicator.
[Claim 4] claims 1-4 in which the connection member (33) was crooked -- an instrument given in either.
[Claim 5] claims 1-4 which the connection member consisted of with the rod (13; 23; 33) with which the edge of the opposite side of a grasping member (12; 22; 32) got fat in order to form housing (19; 28; 38) for fixing a spreading member (15; 25; 35) -- an instrument given in either.
[Claim 6] The instrument according to claim 5 with which housing (28) was prolonged in accordance with the shaft (Y) which accomplishes the include angle (w) which is not zero to the shaft (X) of the rod in the adjoining field (23).
[Claim 7] claims 1-4 in which a connection member has at least two branching members (41) -- an instrument given in either.
[Claim 8] claims 1-7 to which the spreading member (15) curved -- an instrument given in either.
[Claim 9] claims 1-7 to which a spreading member (43) accomplishes the include angle (gamma) which is not zero to the direction of a connection member (41) in the adjoining field of a grasping member -- an instrument given in either.
[Claim 10] The instrument according to claim 10 which has a gestalt with an almost flat spreading member.
[Claim 11] claims 1-10 in which a spreading member (52) has a NA wavelike gestalt -- an instrument given in either.
[Claim 12] claims 1-11 which a spreading member (90) has a core made from the product made from hard material, or a half-rigid ingredient (91), and this core formed the flection, and were connected with the connection member (92) -- an instrument given in either.
[Claim 13] claims 1-12 in which the spreading member (115) was partially formed at least by injection molding of plastic material, for example, an elastomer, -- an instrument given in either.
[Claim 14] claims 1-13 in which a spreading member (112) has hair -- an instrument given in either.
[Claim 15] claims 1-14 with an unsymmetrical spreading member (112) -- an instrument given in either.

[Claim 16] claims 1-15 in which a spreading member (85) has at least one spiral filament -- an instrument given in either.
[Claim 17] claims 1-16 in which a spreading member (71) has the circular cross section -- an instrument given in either.
[Claim 18] claims 1-17 in which a spreading member (118) has 1, two or more slots, or a cavity (119) -- an instrument given in either.
[Claim 19] claims 1-18 from which the eradication member was partially constituted at least by the foam which has at least 5% of open air bubbles -- an instrument given in either.
[Claim 20] The instrument according to claim 19 whose foam is a product made from polyurethane, or a product made from a polyether.
[Claim 21] claims 1-20 which have the cross section where a connection member is smaller than the cross section of a spreading member in the field which contacted the eradication member and extended when the applicator was in the location on a container -- an instrument given in either.
[Claim 22] claims 1-21 which the diameter in the field where it contacted the eradication member and was prolonged when a connection member had the applicator in the location in a container consisted of with the 0.2-0.5mm rod 0.2-2mm especially preferably -- an instrument given in either.

[Translation done.]

* NOTICES *

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3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention] This invention relates to the receipt spreading instrument of a liquid, the shape of a paste (letter of a half-flow), a powdery product, especially cosmetics. More, this invention relates to the receipt spreading instrument of this product possessing the applicator which functions also as a cap which has a grasping member at the other-end section, and closes this container at a detail while having a spreading member at one [this container for product receipt in which the end carried out opening, and] edge. A spreading member and a grasping member are connected by connection member like a rod.
[0002]
[Description of the Prior Art] After a spreading member, a rod, and a grasping member are arranged by the single tier and a spreading member is inserted into a container, a container by which extraction is carried out through the eradication member which at least the part consisted of with the porous material in which elastic deformation like the foam which has at least 5% of open air bubbles is possible is indicated by the international application WO 97/No. 31553.
[0003]
[Problem(s) to be Solved by the Invention] it is the instrument which suited the new human engineering of the aforementioned type, and in order to offer the instrument which raises the possibility of spreading, such as new cosmetics or a skin care product, this invention is ****** while it enables exact spreading of easy-izing of makeup actuation etc., cosmetics, etc. especially.
[0004] Namely, this invention is the receipt spreading instrument of a liquid, the shape of a paste, a powdery product, especially cosmetics. In this container for product receipt in which the end carried out opening, the applicator which has a spreading member at one edge and has a grasping member in the other-end section, and the receipt spreading instrument possessing the connection member which connects this spreading member and a grasping member This instrument possesses further the eradication member by which at least the part was constituted from an ingredient in which porous elastic deformation is possible, and is related with the receipt spreading instrument characterized by arranging this spreading member, this grasping member, and this connection member in the shape of nonlinear.
[0005]
[Embodiment of the Invention] The description of the receipt spreading instrument by this invention is not making a spreading member and a grasping member **** connection member arrange in the shape of a straight line. That is, you incurvate a connection member and a spreading member at least, or make it crooked, and it is made to separate from a spreading member from the shaft orientations of the connection section prolonged in the adjoining field of a grasping member.
[0006] After this invention was made, the applicant checked the following thing to the surprising thing. That is, even if it makes a spreading member incline to the shaft of an eradication member, this spreading member is wiped away so that it can be satisfied with an eradication member (it was expected that the eradication effectiveness which can be transcendentally satisfied depending on such an inclination is not acquired).
[0007] According to this invention, the most exact possible use of easy-izing of manufacture of the applicator which suited human engineering especially, makeup actuation, etc., cosmetics, etc. is

attained.
[0008] In a specific mode, a connection member is a letter of crookedness. Moreover, a connection member is constituted in a specific mode by the rod which has the hypertrophy edge which forms housing which fixes a spreading member in the opposite side of a grasping member. This housing is prolonged in the direction which accomplishes include angles other than 0 times between the directions of this rod in the adjoining field. Moreover, as a gestalt of a spreading member, many gestalten are possible.
[0009] In a specific mode, a spreading member is a letter of a curve. In another specific mode, a spreading member has an almost even gestalt and accomplishes an include angle between the directions of the connection member in the adjoining field of a grasping member. In still more nearly another specific mode, a spreading member has a wavelike gestalt.
[0010] In another specific mode, the spreading member has the core which consists of hard or a half rigidity nature ingredient, and this core is connected with a connection member so that a flection may be formed. Moreover, in a specific mode, injection molding of the spreading member is carried out from plastic material (for example, elastomer) at least partially.
[0011] In a specific mode, a spreading member has hair. In a specific mode, the spreading member is unsymmetrical. In a specific mode, a spreading member has a spiral filament at least. Generally in another specific mode, a spreading member has the curved gestalt. In still more nearly another specific mode, a spreading member has 1, two or more slots, or a cavity.
[0012] Especially the receipt spreading instrument by this invention is applicable to spreading of spreading or the lip stick of eye cosmetics, nail polish, or an imitation, or an imitation, and the consistency and height of a porous material of the gestalt of a spreading member, the description, and an eradication member are chosen according to the description of an object product, an application (purpose of use), and desired effectiveness.
[0013] When the applicator is located in a container, as for the cross section of the connection member in the field in contact with an eradication member, it is desirable to make it smaller than the cross section of a spreading member. In the mode which a connection member consists of with a rod, when the applicator is located in a container, the diameter of this rod in the field which contacted and extended in the eradication member is 0.2-0.5mm more preferably 0.2-2mm.
[0014] In a desirable mode, an eradication member is constituted by the foam block to which the slot went into shaft orientations, and the edge of this slot is in the condition of having compared at the time of un-using it. When a foam block has some slots, this slot may be arranged the shape of a cross joint, and in the shape of a star (radial). Therefore, when it has at least one slot and the applicator is in a position, a connection member does not deform on parenchyma but eradication is preferably performed by the foam block which closes after the extraction of the applicator.
[0015] By using this kind of eradication member, the result of having excelled very much about homogeneity distribution of the product on a spreading member is obtained. Preferably, a spreading member is prolonged on the production of a connection member, one edge on the shaft is connected with a connection member, and the other-end section constitutes the free edge of the applicator.
[0016] Other descriptions and advantages of this invention are clarified by the detailed explanation and the detailed attached drawing of the following about an embodiment which are not what limits this invention.
[0017] Drawing 1 - drawing 4 are the typical sectional views in alignment with the shaft orientations of the receipt spreading instrument by four sorts of embodiments of this invention. Drawing 5 and drawing 6 are the typical perspective views showing separately the container which constitutes the receipt spreading instrument by the 5th embodiment of this invention, and the applicator. Drawing 7 - drawing 15 are the typical perspective views showing the various deformation modes of a spreading member. Drawing 16 - drawing 18 show signs that eye cosmetics, a manicure, and a lip stick are applied using the applicator by this invention, respectively.
[0018] The receipt spreading instrument (10) shown in drawing 1 possesses the container (11) and applicator (12) in which one edge carried out opening. The applicator (12) has the straight-line-like rod (13) in accordance with the shaft (X), this rod equips one edge with the grasping member (14), and this grasping member constitutes the cap for closing a container (11). A rod (13) possesses a spreading member (15) in the other-end section.

[0019] It has a container (cervix (17 which contains the eradication member which 11) consists of with a foam block (16)). An eradication member (16) is fixed in cervix (17) through an outer surface radial [the] using adhesives. The grasping section (14) has the assembly skirt board (18) with which the screw thread was arranged in the interior, in order to **** to the screw thread of the exterior of a container (cervix (17 of 11)) and to stop and make it it.
[0020] When carrying out extraction of the spreading member (15) from a container (11) for use, the slot for passing this spreading member is formed in the aforementioned foam block (16) in accordance with the shaft orientations of drawing 1 .
[0021] The written contents of the international application WO 97/No. 31553 specification with which the various embodiments of an eradication member are indicated can be used effectively. In order to avoid risk of the permanent deformation which spoils eradication ability arising preferably, when the rod (13) of the applicator (12) is located in the interior of a container, it should take care so that the foam of an eradication member (16) may not be compressed too much.
[0022] A foam block (16) may be equal to the direct system of a contact part with a rod (13), may have the cavity of the shaft orientations which have a diameter a little smaller than this diameter, or may make the slot of shaft orientations form in this block as this deformation mode. The part which has the smallest diameter of a rod (13) may be metal, and this diameter is 0.2-0.5mm.
[0023] Furthermore, since a foam block (16) is inserted and fixed into the cervix of a container (11), this block is strengthened along a perpendicular direction and compression of the shaft orientations at the time of passage of a spreading member (15) is prevented.
[0024] The lower edge of a rod (13) forms housing (19) for getting fat and fixing a spreading member (15) on a shaft (X) on a shaft (X), and this spreading member is partially held in this housing. A spreading member (15) can be made into the structure which suited the class of cosmetics with which use is presented. In the case of the mode to illustrate, the spreading member (15) is prolonged along the direction which accomplishes the include angle which increases gradually to a shaft (X) as it is curving and approaches the free end. A spreading member is prolonged [/ near this free end] along the direction (Y) which accomplishes the include angle of 60 degrees as opposed to a shaft (X).
[0025] a container (11) -- cosmetics -- it is preferably filled with liquefied cosmetics (these cosmetics are omitted in order to make drawing legible). In a surprising thing, it can wipe away by uniform actuation at the time of the passage within a foam block (16), without making the little surplus cosmetics which harm a spreading member (15) for the quality of cosmetics remain. Such a result originates in the porosity and deformans of a foam block (16), and it is obtained, and while the surplus cosmetics which exist in a part of spreading member sink into this block, the cosmetics which exist in another part of a spreading member with the inadequate content of cosmetics deposit by capillary action.
[0026] In order to present use with the applicator (12), when carrying out extraction of the foam block (16) from a container (11), or when returning this applicator to the original location, it conforms to wiping away a rod (13). Especially since formation of the solid-state-like residue by the desiccation on a rod is avoided by this, such eradication of a rod (13) is advantageous.
[0027] The foam made from polyurethane which has open air bubbles as an eradication member, for example, a product, and the foam made from a polyether can be used. As for this kind of foam, it is desirable to have at least 5% of open air bubbles, and the diameter of these air bubbles is 5 micrometers - 3mm preferably. The height of a foam block is 1.5-80mm.
[0028] According to the consistency of foam, and the height of a foam block, an eradication member carries out adhesion adaptation with the appearance of this spreading member, when a spreading member penetrates a foam block. When the trial about the deposition of the cosmetics to a spreading member was performed, in a certain case, the coat of cosmetics adhered to the appearance of a spreading member, but when another, upheaval of a spreading member was covered with the coat of the cosmetics by surface tension.
[0029] The amount of the cosmetics which this spreading member tends to transform when penetrating a foam block generally so that a spreading member is flexible, and remain on this spreading member after eradication decreases more. Especially the amount of the cosmetics which adhere on a brush when turning down this spreading member when penetrating an eradication

member so that the hair of a brush is flexible, when a spreading member is a brush, becoming easy to approach the shaft of a brush and carrying out extraction of the applicator completely from a container decreases more.

[0030] The hair of the brush at the time of un-using it may be perpendicularly prolonged to the direction of arbitration, for example, the shaft of a grasping member. ** should be cared about at the following thing. namely, the rod and the spreading member which in the case of the liquefied cosmetics (for example, aquosity constituent of acrylic resin or polyurethane resin) by which the product held in a container uses water as a solvent maintenance ****** can do sufficient moisture in order to prevent bridge formation within the foam of this resin contained in these cosmetics until a foam block uses up these cosmetics in a container, and pass through the inside of this block by this -- ****** -- things are made.

[0031] The foam block which constitutes an eradication member by bolting and mooring of :(1) spreading member which show the next operation simultaneously Surplus cosmetics, and liquefied or the mechanical eradication and the mechanical defecation operation of this spreading member by the solid-state-like residue by which have been generated by desiccation of paste-like cosmetics being shaved off, (2) The absorption by the absorption when returning to the original gestalt after the absorption by capillarity, and the local compression by passage of (3) spreading member, and sinking-in operation of the cosmetics to the spreading member by which coating weight of the cosmetics to (4) spreading member has been performed to the eradication member when there are also few twists.

[0032] A container (11) has such sufficient magnitude that a spreading member (15) does not contact the wall of a container when the applicator (12) is located in the interior of this container (11). Moreover, opening of a container (11) has sufficient magnitude to enable in-and-out of the spreading member (15) to this container (11). In order to carry out extraction of the applicator (12), after returning **** of a grasping member (14), this member is moved upwards in the parallel condition to a shaft (X).

[0033] A spreading member (15) has the gestalt which can pass a foam block (16), without a user leaning a rod (13). When itself carries out elastic deformation of the spreading member (15), it passes through the inside of a foam block (16) still more easily. The spreading member (15) may have a gestalt to which a user leans a rod (13) automatically, when passing through the inside of this spreading member (15) and a foam block (16).

[0034] In order to return the applicator to the original location, a spreading member (15) is introduced into opening of a container, and this spreading member (15) is pushed in into a foam block (16). preferably, a foam block (16) has a special user -- this member is returned to the original location, without being careful or turning a spreading member (15) in the predetermined direction -- it has sufficient flexibility.

[0035] the following explanation -- since the eradication member has the similar gestalt, and shows it by (16) in drawing 2 - drawing 4 and this is not further explained in full detail if it is, please refer to previous explanation. The receipt spreading instrument (20) shown in drawing 2 is similar with the above-mentioned receipt spreading instrument (10) about the upper part of a grasping member and a container (21). The applicator (22) has the straight-line-like rod (23) about the shaft (X), and inclination housing (28) with which it got fat for fixing a spreading member (25) is formed in the lower edge of this rod. Housing (28) is prolonged in accordance with a shaft (Y), and a shaft (Y) and the shaft (Y) of a rod (23) accomplish an include angle (w), this include angle is 10 - 60 degrees preferably, and, in the case of drawing 2 , it is about 45 degrees.

[0036] At the time of un-using it, about a shaft (Y), although a spreading member (25) is a straight line-like mostly, in the case of the strange gestalt who is not illustrating, it may be crooked. In the case of the mode shown in drawing 2 , in order to make a spreading member go in and out, it should care about that a rod (23) must be leaned a little. This is because the spreading member is longer than the cervix bore of a container.

[0037] In another mode, a grasping member ****s the cap (closing member) of a container above a container cervix, and a stop may be made to be carried out to it. For example, in the case of the receipt spreading instrument (30) shown in drawing 3 , fitting maintenance of the grasping member is carried out in the cervix upper part of a container. It has the rod (33) of the letter of crookedness,

this rod consists of two straight-line-like parts, both accomplish an include angle (v), this include angle is 10 - 60 degrees preferably, and the applicator (32) is about 30 degrees in the example shown in drawing. The flection (36) of a rod (33) is located immediately under a foam block (16), when the applicator (32) is in a position.

[0038] A spreading member (35) is located on the production of the straight-line-like section of the lower part of a rod (33). In the case of this example, a spreading member (35) has twice [about] as large the maximum breadth as the diameter of the limb (38) located in the lower edge of a rod (33), and this limb forms housing for fixing a spreading member (35).

[0039] In the mode shown in drawing 4 , the connection member between a grasping member (44) and a spreading member (43) has a straight-line-like branching object (41) parallel to mutual [two], and housing (42) which fixes a spreading member (43) is connected with the lower edge of this branching object. A spreading member (43) consists of two or more of these **** arranged almost in parallel, these fields form two face angles (r) between the fields of a branching object (41), and this include angle is 100 - 170 degrees preferably.

[0040] The field of a branching object (41) is parallel to the slot side within the foam block (16) for passing the cutting plane and spreading member (43) of drawing 4 . In this case, when the applicator is in a position, in order to make the field of a branching object (41) in agreement with the slot side of a foam block (16), it is advantageous to use the means deduced and carried out so that this grasping member may constitute an angle and may be located to this cervix about the cervix of a container and a grasping member (44). The diameter of a branching object (41) is made small as deformation of foam can become very small.

[0041] In the receipt spreading instrument (50) shown in drawing 5 and drawing 6 , a spreading member (52) has big width of face and a big wavelike gestalt. a container and the applicator (51) -- being swollen -- **** -- it is separately shown in drawing 5 and drawing 6 . An eradication member consists of foam by which the sufficiently long slot went into passing a spreading member (52) and which has the gestalt of a parallelepiped mostly. The connection member (53) which connects a spreading member (52) and a grasping member (54) was constituted in the flat wall, this flat wall has got fat at the lower edge, and this hypertrophy section has a slot for fixing a spreading member (52).

[0042] The grasping member (54) is equipped with the skirt board which surrounds a connection member (53), and since this skirt board closes so that eradication of the applicator (51) and maintenance in a predetermined location may be enabled, it has the gestalt which suited inserting in on a container. Although the spreading member (52) has the wavelike gestalt, it originates in the deformability of foam and is wiped away accurately. Foam has sufficient flexibility to contact the crevice of a spreading member. In the case of the mode to illustrate, to the flat wall of a connection member (53), a spreading member (52) accomplishes the include angle of about 45 degrees, and is prolonged.

[0043] Generally, the gestalt of a spreading member can be variously changed by using a foam block for eradication. For example, the spreading member (71) shown in drawing 7 has the gestalt which curved around the shaft (Z), and this shaft accomplishes an include angle (u) between the shafts of a connection member (74). An include angle (u) is 10 - 60 degrees preferably. Generally a spreading member (71) has the radii-like cross section in the direction of a cross section perpendicular to a shaft (Z). The edge (73) which has separated slightly the side edge section (72) of a spreading member (71) from the connection member (74), and is distant from a connection member (74) has the gestalt which became depressed a little inside in a ****** case. The spreading member (71) is suitable for spreading of the cosmetics to the front face of a pawl.

[0044] The spreading member (80) shown in drawing 8 has the unsymmetrical gestalt which cut deeply to the flank and was equipped with the section (81). A spreading member (80) may be for example, a product made from foam. It can cut deeply after eradication and cosmetics can be made to remain at the pars basilaris ossis occipitalis of the section by choosing this foam so that it may have sufficient concentration which cuts deeply while the foam of an eradication member wipes away, and is not attained to the pars basilaris ossis occipitalis of the section. Therefore, the slitting section (81) constitutes from a container the cosmetics reservoir section which makes the continuous duty ability of the applicator after extraction extend. A spreading member (80) is prolonged in the direction which accomplishes the include angle which is not zero to the shaft of a continuous

member (82) (refer to drawing 8). Moreover, a spreading member (80) has a filament slot which is illustrated.
[0045] The spreading member (85) shown in drawing 9 has the spiral filament prolonged in accordance with the shaft (Z) which accomplishes an include angle (t) to the shaft (X) of a rod (86). An include angle (t) is about 30 degrees.
[0046] The spreading member (90) shown in drawing 10 has the core made from a semi-rigid plastic (91) which holds two arms (91) connected through the flection (93), and (92). An arm (92) gears inside housing formed in the lower edge of the rod (95) of the applicator. Another arm (91) supports this block while raising the rigidity of the foam block for cosmetics spreading (94).
[0047] The spreading member 100 shown in drawing 11 has the gestalt of the shape of a spheroid of almost a trapezoid [cross section / which extended in accordance with the shaft (U)]. Each front face of a spreading member has the hollow which became depressed a little outside. A spreading member (100) has a taper edge (101). A spreading member (100) may be manufactured with injection molding from the plastic material of hard, half rigidity, or elasticity. In the case of the mode to illustrate, a spreading member (100) is put between the interior of housing (102) formed in the lower edge of the rod (103) of the applicator. This housing accomplishes the include angle which is not zero to the shaft (X) of a rod (103). A spreading member may be made to a rod and really fabricate in the strange gestalt who does not illustrate.
[0048] Like [in the case of the applicator (105) shown in drawing 12], the spreading member may be constituted by the brush, and although this brush may be the thing of the gestalt of arbitration, you may have a large and small diameter part especially. This kind of applicator (105) has the metal core (106) constituted by the metal silk manufacture which is twisted spirally and supports hair (107), and the shaft of this brush accomplishes the include angle (s) of about 30 degrees as opposed to the shaft (X) of a rod (108). In this case, the core (106) is crooked and it is fixed to the interior of housing formed in the interior of the hypertrophy section (109) of the lower edge of a rod (108) (this housing is located on a shaft (X)). In the strange gestalt who does not illustrate, this housing inclines and the core of a brush is completely a straight line-like.
[0049] The front face of the spreading member (112) shown in drawing 13 is flocked (that is, covered with thin hair). The spreading member (112) is unsymmetrical about the shaft (X) of the rod (113) of the applicator so that clearly from drawing 13 . It originates in this unsymmetrical gestalt and a spreading member (112) is not located on the same line with a rod (113).
[0050] The spreading member (115) of the shape of a curve shown in drawing 14 has the gestalt corresponding to 1/about 4 of a circle, generally the cross section is a circle configuration, and the front face is check-like. The general gestalt of this applicator is similar to the gestalt of the above-mentioned applicator (15), from plastic material, injection molding of this applicator may be carried out, and it may be manufactured.
[0051] Being able to manufacture the applicator (118) shown in drawing 15 by the casting of plastic material, this applicator has a slot or a cavity (119). Although such a slot or a cavity (119) stores the cosmetics which exist in the interior of a spreading member (118) with surface tension after eradication, this is because an eradication member cannot penetrate the interior of this slit or a cavity easily.
[0052] The aforementioned applicator (10) for applying eye cosmetics to drawing 16 and the use mode of (20) are shown. By using the spreading member in which this kind carried out eccentricity, a user can make makeup of an eye still easier.
[0053] Furthermore, cosmetics can be applied in the condition of having suited very much in human engineering, on a pawl by using the eccentric spreading member by this invention, for example, the above-mentioned spreading member, (72) (refer to drawing 17).
[0054] A user can apply lip cosmetics still more easily by using an unsymmetrical spreading member (112) for ** again (refer to drawing 18).
[0055] The receipt spreading instrument by this invention is applicable also to for example, the product for hair. When using a rod as a connection member, a grasping member can be turned in the direction of arbitration about the cervix of a container, when the applicator exists in the original location (however, it is contingent [on having sufficient magnitude for this container containing a spreading member] irrespective of the shaft orientation of a container cervix in this case).

[0056] As for a connection member, in the above-mentioned various embodiments, it is desirable to have considerable flexibility. Of course, this invention is not limited to the above-mentioned embodiment, and the various deformation modes which include the combination of the description of the proper of this invention and each above-mentioned embodiment in a part especially are also included by this invention.
[0057]
[Effect of the Invention] Since the receipt spreading instrument by this invention conforms to human engineering, exact spreading of easy-izing of makeup actuation etc., cosmetics, etc. is not only attained especially, but it can raise the possibility of spreading, such as new cosmetics, by using this.

[Translation done.]

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is the typical sectional view showing the 1st embodiment of the receipt spreading instrument by this invention.
[Drawing 2] It is the typical sectional view showing the 2nd embodiment of the receipt spreading instrument by this invention.
[Drawing 3] It is the typical sectional view showing the 3rd embodiment of the receipt spreading instrument by this invention.
[Drawing 4] It is the typical sectional view showing the 4th embodiment of the receipt spreading instrument by this invention.
[Drawing 5] It is the typical perspective view of the container which constitutes the 5th embodiment of the receipt spreading instrument by this invention.
[Drawing 6] It is the typical perspective view of the applicator which constitutes the 5th embodiment of the receipt spreading instrument by this invention.
[Drawing 7] It is the typical perspective view of a spreading member which has the circular cross section.
[Drawing 8] It is the typical perspective view of an unsymmetrical spreading member which has the slitting section.
[Drawing 9] It is the typical perspective view of a spreading member which has a spiral filament.
[Drawing 10] It is the typical perspective view of a spreading member which has the core made from a semi-rigid plastic which holds two arms.
[Drawing 11] It is the typical perspective view of a spheroid-like spreading member.
[Drawing 12] It is the typical perspective view of a spreading member which has a brush.
[Drawing 13] It is the typical perspective view of an unsymmetrical spreading member which has a flocking front face.
[Drawing 14] It is the typical perspective view of a curve-like spreading member which has a check-like front face.
[Drawing 15] It is the typical perspective view of a spreading member which has a slot or a cavity.
[Drawing 16] It is the mimetic diagram showing the use mode of the eye cosmetics applicator by this invention.
[Drawing 17] It is the mimetic diagram showing the use mode of the MAKYUA applicator by this invention.
[Drawing 18] It is the mimetic diagram showing the use mode of the lip cosmetics applicator by this invention.
[Description of Notations]
11, 21, 31 -- Container
12, 22, 32, 44, 54 -- Grasping member
13, 23, 33, 86, 95,103,108,113 -- Rod
15, 25, 35, 43, 52, 71, 80, 85, 90,100,112,115,118 -- Spreading member
16 94 -- Foam block
19, 28, 38 -- Housing

[Translation done.]

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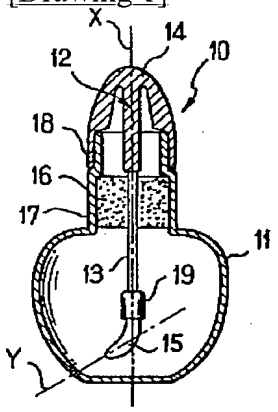
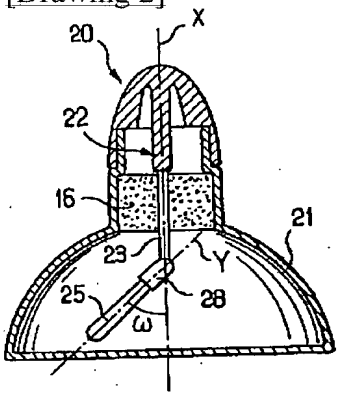
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DRAWINGS

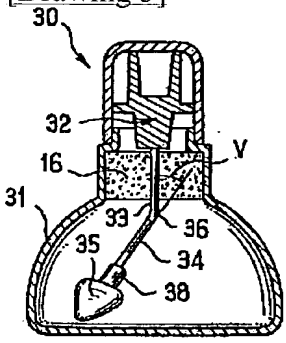
[Drawing 1]



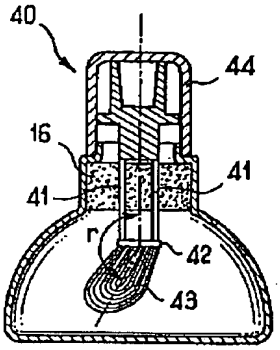
[Drawing 2]



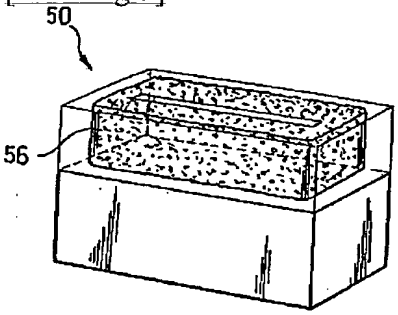
[Drawing 3]



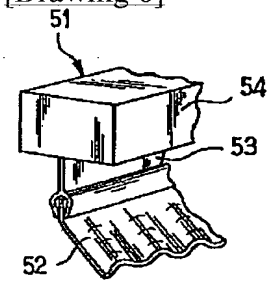
[Drawing 4]



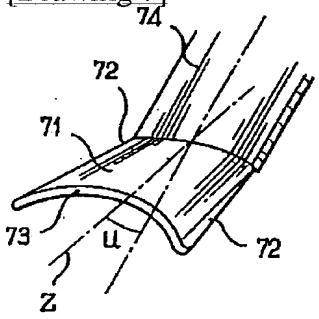
[Drawing 5]



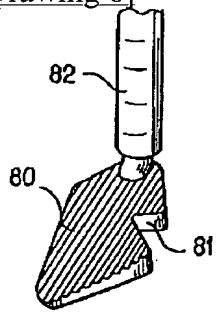
[Drawing 6]



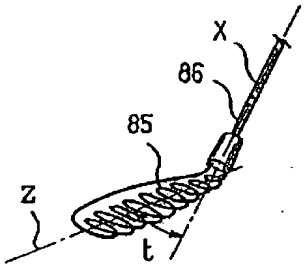
[Drawing 7]



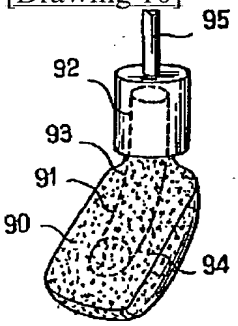
[Drawing 8]



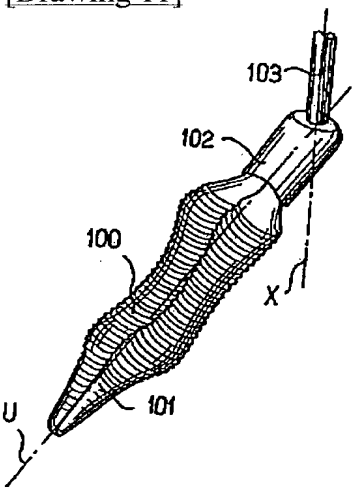
[Drawing 9]



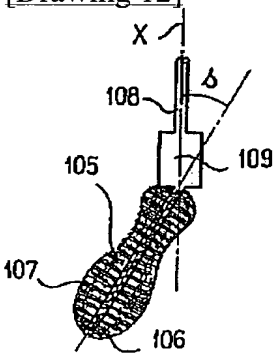
[Drawing 10]



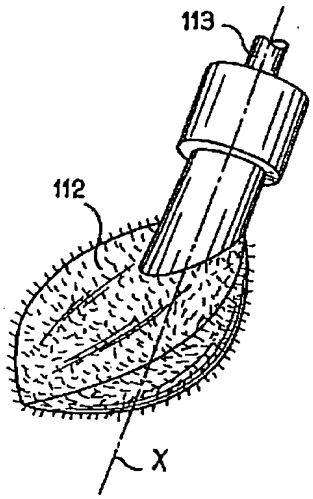
[Drawing 11]



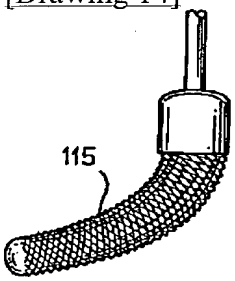
[Drawing 12]



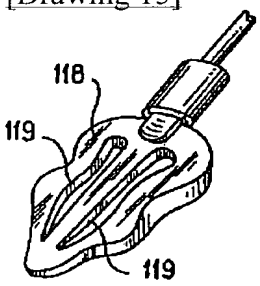
[Drawing 13]



[Drawing 14]



[Drawing 15]



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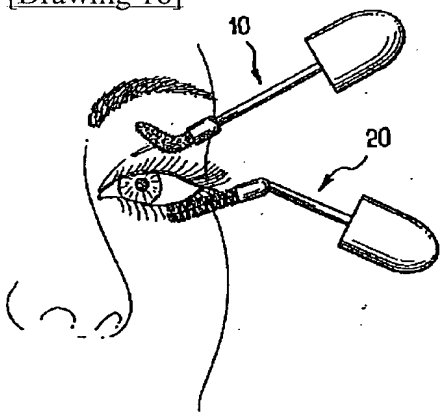
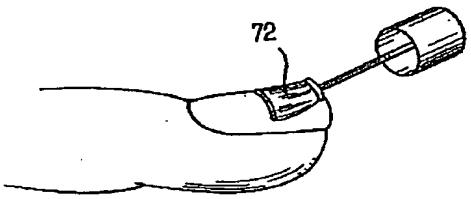
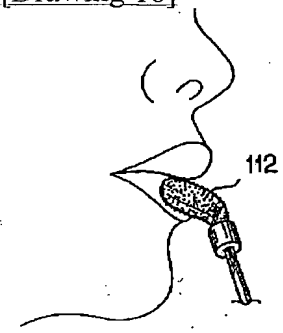


[Drawing 17]



[Drawing 18]



[Translation done.]